1. A method for determining an initial flow rate of a liquid in a conduit, comprising:

(a) introducing a discrete volume change to the initial flow rate;

(b) sensing a corresponding resulting change in the flow in the conduit; and

(c) determining the initial flow rate in response to the introduced volume change and the sensed resulting change.

2. The method of Claim 1, wherein introducing a discrete volume change includes injecting or withdrawing the discrete volume from the conduit.

3. The method of Claim 1, further comprising employing one of a flow characteristic sensor and a liquid characteristic sensor.

4. The method of Claim 1, wherein sensing the corresponding resulting change includes sensing at an upstream location to the introduced volume change and a downstream location to the introduced volume change.

5. The method of Claim 1, wherein sensing the corresponding resulting change includes employing a sensor located at one of in the conduit, on the conduit or spaced from an exterior of the conduit.

6. The method of Claim 1, wherein introducing the discrete volume change includes introducing the discrete volume change through a catheter in the conduit.

7. The method of Claim 1, further comprising sensing the corresponding resulting change in one of a liquid characteristic and a flow characteristic.

8. The method of Claim 1, wherein sensing a corresponding resulting change includes sensing a corresponding resulting change proportional to the flow in the conduit.

9. The method of Claim 1, wherein sensing a corresponding resulting change includes sensing one of a velocity, pressure and flow rate of the flow in the conduit.

10. The method of Claim 1, wherein sensing a corresponding resulting change includes sensing a dilution indicator.

11. A method for determining an initial flow rate in a conduit, comprising:

(a) locating a catheter in the conduit;

(b) introducing a known volume change to the initial flow rate through the catheter; and

(c) determining the initial flow rate in response to the introduced known volume change and a resulting change in the initial flow rate.

12. The method of Claim 11, wherein introducing a known volume change includes introducing a discrete volume change.

13. The method of Claim11, wherein introducing a known volume change includes injecting or withdrawing the discrete volume from the conduit.

14. The method of Claim 11, further comprising employing one of a flow characteristic sensor and a liquid characteristic sensor.

15. The method of Claim 11, wherein sensing the corresponding resulting change includes sensing at an upstream location to the introduced known volume change and a downstream location to the introduced known volume change.

16. The method of Claim 11, wherein sensing a corresponding resulting change includes sensing with a sensor located at one of in the conduit, on the conduit or spaced from an exterior of the conduit.

17. The method of Claim 11, further comprising sensing a resulting change after introducing the known volume change.

18. The method of Claim 17, wherein sensing the resulting change includes sensing a change corresponding to the introduced known volume change in one of a liquid characteristic and a flow characteristic.

19. The method of Claim 17, further comprising sensing a resulting change as proportional to the flow in the conduit.

20. A method for determining an initial flow rate in a conduit, comprising:

(a) introducing a discrete known volume change to the initial flow in the conduit to produce a resulting change in the initial flow; and

(b) determining the initial flow rate in response to the introduced discrete known volume change and the resulting change.

21. The method of Claim 20, further comprising employing a sensor to sense the resulting change in the flow.

22. An apparatus for determining an initial flow rate in a conduit, comprising:

(a) means for introducing a discrete known volume change to the initial flow;

(b) a sensor for measuring a corresponding change resulting from the introduced discrete known volume change; and

(c) a controller connected to the sensor, the controller configured to determine the initial flow rate in a response to the known volume change and the corresponding change.

23. The apparatus of Claim 22, further comprising a catheter having an introduction port.

24. The apparatus of Claim 23, wherein the sensor is connected to the catheter.

25. An apparatus for determining an initial flow rate in a conduit, comprising:

(a) a known volume change introducer selected to effect a discrete known volume change to produce a resulting change in the initial flow in the conduit;

(b) a sensor for measuring the resulting change; and

(c) a controller connected to the sensor, the controller configured to determine the initial flow rate in a response to the known volume change and the resulting change measured by the sensor.

26. A method for determining an initial blood flow rate in a conduit, comprising:

(a) introducing a volume of an indicator into the conduit to create a discrete volume change in the initial flow and a liquid characteristic change in the conduit;

(b) optically sensing the liquid characteristic change in the conduit with a sensor located external to the conduit; and

(c) determining the initial blood flow rate in the conduit in response to the introduced volume of indicator and the sensed liquid characteristic change.

27. The method of Claim 26, wherein introducing the volume of the indicator includes introducing a change in blood hematocrit in the conduit.

28. The method of Claim 26, wherein introducing the volume of the indicator includes introducing a solution including at least one of saline and glucose into the conduit.

29. The method of Claim 28 further comprising introducing an isotonic solution into the conduit.

30. The method of Claim 26, wherein optically sensing the liquid characteristic change includes obtaining a value proportional to the liquid characteristic change.

31. The method of Claim 26, wherein introducing the volume of the indicator into the conduit includes introducing the volume of indicator upstream of an area sensed by the optical sensor.

32. The method of Claim 26, wherein the liquid characteristic is blood hematocrit.

33. The method of Claim 26, wherein optically sensing the liquid characteristic change includes obtaining a value proportional to blood hematocrit in the conduit.